

REMARKS

The claims now before the examiner are 1-6, 8-10 and 13.

The amendments

The examiner is thanked for calling certain typographical errors to applicants' attention. The errors have been corrected accordingly along with others noted by applicants.

Claim 1 has been amended to incorporate the Markush grouping of polymers set forth in the paragraph bridging pages 2 and 3 of the specification and it is required that the thermoplastic polymer be reinforced, as note page 2 lines 30 et seq.

Also, and not insignificantly, the process for preparing the composite has been added to claim 1, cf. the paragraph bridging pages 4 and 5 and the examples. Claim 1 now indicates that the layered composite is "useful for floor coverings and wall panels."

The wording of claim 7 (now claim 13) has been changed to more closely comply with prevailing USPTO practice. Otherwise, the amendments are of a house-keeping nature requiring no detailed discussion.

The rejections over prior art

The rejections were as follows:

- (1) Original claims 1, 3, 4 and 8-10 under 35 USC § 102(b) over Johnson (US 5,139,854).
- (2) Original claims 1 and 2 under 35 USC § 103(a) over DeRenzo (US 5,851,931) in view of Tyner (US 5,486,391) and Miyakoshi (US 5,827,788).

(3) Original claim 5 under 35 USC § 103(a) over Johnson (*supra*) in view of Miyakoshi (*supra*)

(4) Original claim 6 under 35 USC § 103(a) over Johnson (*supra*) in view of Pelzer (US 6,019,923).

(5) Original claims 1, 7 and 10 under 35 USC § 103(a) over Welz (US 4,262,051) in view of Miyakoshi (*supra*).

Preliminarily, it should be kept in mind that the claims now define the layered composite in terms of how it is prepared -- i.e., in *product-by-process* language. In addition the polymers making up the *reinforced thermoplastic polymer backing layer* are set forth in "Markush" language. It is this particular combination whereby applicants' invention distinguishes significantly over the closest prior art discussed, *inter alia*, in the specification at page 2, first full paragraph. It provides for, *inter alia*, high stability against delamination or swelling due to the influence of chemical solvent or steam, mechanical damage or thermal treatment as note, *inter alia* spec., page 5, lines 17 et seq. and the experiments outlined in Tables 1-4 at pages 11-14. It is these particular properties which makes applicants' layered composite "useful for floor coverings and wall panels."

Moreover, it cannot escape notice that the examiner has now found it necessary to apply some five references, in various combinations, to reconstruct applicants' invention. See *In re Herrick*, 344 F.2d 713, 145 USPQ 400 (CCPA 1965) (One good reference is better than many poor ones, and the many do not make the one any better).

.Rejection (1)

Johnson is directed to a coating composition particularly for use in forming exterior finishes on the exterior of vehicle parts. Johnson's composite requires four layers, layer 2 (Figs. 1 and 2), the second layer down, necessarily being a "paint layer" which includes a pigment.

Though bits and pieces of applicants' invention may be dredged up from Johnson's encyclopedic disclosure, the reference is inadequate for a proper anticipation under 35 USC § 102. As pointed out by the court in *Air Products and Chemicals, Inc. v. Chas. S. Tanner Co. et al.*, 219 USPQ 223, 231 (DC SC 1983) :

"picking and choosing" from an encyclopedic disclosure will not anticipate.

In re Arkley, 455 F.2d 586, 172 USPQ 524 (CCPA 1972); *In re Samour*, 571 F.2d 559, 562, 197 USPQ 1, 3-4 (CCPA 1978); *General Battery Corp. v. Gould, Inc.*, 545 F.Supp. 731, 740, 215 USPQ 1007, 1013-14 (D.Del. 1982).

As further pointed out in *In re Donohue*, 766 F.2d 531, 226 USPQ 619 (Fed. Cir. 1985), a §102(b) reference "must sufficiently describe the claimed invention to have placed the public in possession of it." Id. at 533, 226 USPQ at 621 (citing *In re Samour*, 571 F.2d 559, 562, 197 USPQ 1 (CCPA 1978)).

Moreover, applicants' claims now employ the language "consisting essentially of" to define their layered composite. This necessarily excludes laminae and/or layers that would "materially affect the basic and novel characteristics" of the claimed composition.

In re Herz, 537 F.2d 549, 551, 190 USPQ 461, 463 (CCPA 1976); *In re*

Janakirama-Rao, 317 F.2d 951, 954, 137 USPQ 893, 895 (CCPA 1963). The present claims thus now exclude the particular four layered structure of Johnson.

Most certainly, Johnson's roller coating method for the manufacture of its product, as exemplified in Fig. 3, hardly teaches the method set out in applicants' claims for making their layered composite, and would hardly be expected to result in the structure of applicants' claims.

Rejection (2)

DeRenzo, a second "primary" reference, is directed to a paintable substrate of non-woven fabric and extruded resin. It sets forth a laminate requiring one or two non-wovens adhered to a freshly extruded resin core layer, element 14 of Fig. 1. Its utility is as a "paint and arts and crafts substrate...[which]... can receive paints via brush or silk-screen, as well as sewn on or adhered appliqués," col 1, lines 6-10. It is a "recoatable, that is, [it] can be later colored in its surface." (*ibid*).

Such a substrate hardly relates to applicants' novel layered composite, particularly as now set forth. Cf. *In Re Clay*, 966 F.2d 656, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992) (Reference must be in a field of endeavor which would have motivated the skilled worker to make the modification.)

Nor do Tyner and/or Miyakoshi reasonably suggest how to modify DeRenzo to come up with applicants' layered composite. Tyner, similar to DeRenzo, is directed to portable fabric covered divider panels for use as space dividers. Similarly, Miyakoshi, like DeRenzo, is concerned with a recoatable decorative sheet and material comprising a non-woven fabric layer 22 over a patterned layer on a substrate 3.

The relationship of the reference teachings to applicants' layered composite, which "consists essentially of" certain layers, made by a particular process which "useful for floor coverings and wall panels", is tenuous at best. The examiner has not made out a *prima facie* case for obviousness of the invention as a *whole at the time the invention was made*. Rather he has shown that, with hindsight, the various bits and pieces *might* be found in the prior art using appellants' claims as a road map. This is a forbidden approach. See, *inter alia*, *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 228 USPQ 90, 98 (Fed. Cir. 1985) (Hindsight is a tempting but forbidden zone).

Indeed, the combination as applied by the examiner would not have suggested applicants' invention to the skilled worker.

Rejection (3)

Both Johnson and Miyakoshi have been discussed above. Again, without the use of forbidden hindsight, it is not clear what teaching would have motivated the skilled worker to make the necessary modifications to Johnson to come up with applicants invention, namely, applicants' layered composite, which "consists essentially of" certain layers, made by a particular process which are "useful for floor coverings and wall panels", as discussed above. Merely substituting polybutylene terephthalate for Johnson's layer 5 would not result in applicants' product.

Rejection (4)

Similar to the case in rejection (3), merely substituting the polyoxymethylene of Plezer's decorative laminate for Johnson's layer 5 would not result in applicants' product as discussed above.

Rejection (5)

Welz, a third "primary" reference cited by the examiner, discloses a laminate comprising (a) a base layer of a polyolefin, (c) an outer decorative layer and (b) an intermediate adhesive layer. Lacking, *inter alia*, from its combination with Myakoshi is the necessary teaching, reason, suggestion or motivation that the references should be combined and the parameters selected in such a manner as to come up with applicants' invention.

See, *inter alia*, *In re Lee*, 61 USPQ2d 1430 (Fed.Cir. 2002): PTO must still provide "objective evidence of record to support a suggestion to combine references....This factual question [of motivation to combine] is material to patentability, and could not be resolved on subjective belief and unknown authority." See also *In re Fitch*, 974 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed.Cir. 1992) (PTO must show "objective teaching" for the combination.)

Accordingly, allowance is respectfully solicited. However, should the examiner disagree, it is respectfully requested that the amendment be entered for the purpose of placing this application in better condition for appeal.

Please find attached a check for \$110.00 for a one month extension of time fee.

To the extent necessary, applicant(s) petition for an Extension of Time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

MUELLER et al.

Serial No. 09/456,516

Respectfully submitted,
KEIL & WEINKAUF



Herbert B. Keil
Reg. No. 18,967

1350 Connecticut Ave., N.W.
Washington, D.C. 20036
(202)659-0100
HBK/NGT/mks

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend claims 1, 2, 3, 4, 8, 9 and newly added 13 as follows:

1.(twice amended) A layered [comosite] composite useful for flooring coverings and wall panels with at least one decorative surface and [comprising] consisting essentially of a backing layer [made from] of a reinforced thermoplastic polymer which is not polypropylene, a decorative layer arranged thereupon and a heat-cured layer applied to the decorative layer wherein the total thickness of the layered composite is from 1 to 20 mm and whose backing layer makes up at least 80% of the thickness wherein said reinforced thermoplastic polymer comprises polyethylene, polyvinyl chloride, polyesters, polycarbonates, polyacrylates, polymethacrylates, polyamide, polyurethane, a polyacetal and/or polystyrenes,

which layered composite is prepared by

heating said reinforced thermoplastic polymer to at least 180°C in an extruder and then,

under a pressure of at least 80N/cm², introducing said heated reinforced thermoplastic polymer into an injection molding chamber of an injection-molding machine into which the films for the decorative layer and the heat cured layer and an optional heat-cured layer and/or an intermediate layer,

applying to the layers in the injection-molding machine a holding pressure of at least 10 N/cm²,

while maintaining said pressure, cooling to a temperature not below 60°C for a period of not more than 4 minutes, and then

removing the layered composite from the injection-molding chamber.

2.(amended) A layered composite as claimed in claim 1, where a decorative layer and a heat-cured layer applied to the decorative layer are present on each side of the backing layer made from [a] said thermoplastic polymer [which is not polypropylene] reinforced thermoplastic polymer.

[3 A] 3.(amended) A layered composite as claimed in claim 1, where an intermediate layer is also inserted as bonding material between the backing layer and the decorative layer.

4.(amended) A layered composite as claimed in [claim] claim 1 and comprising a polystyrene backing layer.

7.(canceled) ~~A layered composite as claimed in claim 1 and also comprising, in the backing layer, from 10 to 60% by weight, based on the total weight of the mixture, of reinforcing material, where this reinforcing material is composed of barium sulfate, magnesium hydroxide, talc, wood, flax, chalk, glass fibers or glass beads.~~

8.(amended) A layered composite as claimed in [.]claim 1, where the decorative layer [is composed] comprises of a polymeric material which has an embossment or a coloration or a combination of both, or of paper or of a fabric or of a paper-like or fabric-like or wood-like material.

9.(amended) A layered composite as claimed in claim 1, where the heat-cured layer arranged on the decorative layer is [composed of] comprises a thermosetting polymeric material, crosslinked by exposure to pressure or heat [during] during the production of the layered composite.

Please add new claim 13 in place of canceled claim 7

13.(newly added) A layered composite as claimed in claim 1 wherein the reinforcing material of the reinforced thermoplastic polymer comprises barium sulfate, magnesium hydroxide, talc, wood, flax, chalk, glass fibers or glass beads.